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Video material archive system for efficient video editing based on media identification

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Abstract

This paper proposes a new media identification related application; a video material archive system for efficient video editing. This system allows content creators to track the usage history of all the archived materials to support their access to the desired materials. It also provides the citation frequency of each material so that creators can measure its importance. A feature-based media identification method is employed to create the usage history and the citation frequency data. Experimental results show that the use of this identification method makes it possible to create those data fully automatically without forcing any changes to the existing devices.

Index Terms

Inspection

Controlled Indexing

content-based retrieval information retrieval systems multimedia communication multimedia computing multimedia databases video signal processing visual databases

Non-controlled Indexing

archived materials access content creators feature-based media identification method materials citation frequency media identification usage history tracking video editing video material archive system

Author Keywords

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References

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Digital rights management and watermarking of multimedia content for m-commerce applications

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Abstract

E-commerce has become a huge business and a driving factor in the development of the Internet. Online shopping services are well established and will, with the advent of evolved 2G and 3G mobile networks, soon be complemented by their wireless counterparts. Furthermore, online delivery of digital media, such as MP3 audio or video, is very popular today and will become an increasingly important part of e-commerce and mobile e-commerce (m-commerce). However, major obstacle for digital media distribution and associated business is the possibility of unlimited consecutive copying in the digital domain, which threatens intellectual property rights (e.g., copyrights). Digital rights management systems are required to protect rights and business. DRM systems typically incorporate encryption, conditional access, copy control mechanisms, and media identification and tracing mechanisms. Watermarking is the technology used for copy control and media identification and tracing. Most proposed watermarking methods use a so-called spread spectrum approach: a pseudo-noise signal with small amplitude is added to the host signal, and later on detected using correlation methods. A secret key is used to ensure that the watermark can only be detected and removed by authorized parties. Thus, watermarking is an essential component of modern DRM systems. Several standardization bodies are involved in DRM standardization. Some examples, (MPEG-4, SDMI, and DVD), are discussed in this article. Watermarking as an enabling technology is especially highlighted. Furthermore, the relation between DRM and m-commerce, and the impact on business models for m-commerce are discussed. A common experience today is that Internet e-commerce applications cannot always easily be adapted for mobile telecommunications systems. We emphasize, however, that DRM and watermarking can benefit from the additional information available in mobile telecommunications systems, and can thus help to improve rights management for digital media delivery.

Index Terms

Inspec

Controlled Indexing

Internet copy protection electronic commerce industrial property land mobile radio multimedia communication security of data standardisation

Non-controlled Indexing

DRM standardization MP3 audio MP3 video business conditional access copy control mechanisms copyrights digital media digital media distribution digital rights management digital watermarking e-commerce encryption intellectual property rights m-commerce applications media identification mobile e-commerce mobile networks multimedia content online delivery online shopping services secret key spread spectrum tracing mechanisms

Author Keywords

Not Available

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